



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 30, 2020

John Wrubel
Regulatory Affairs Director
Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine Street, 14th Floor
New York, NY 10005

Subject: PRIA Label Amendment – Revising the directions for use for almonds, grapes, stone fruit and soybeans
Product Name: Topsin M WSB
EPA Registration Number: 8033-125
Application Date: 8/29/2018
Decision Number: 543884

Dear Mr. Wrubel:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Page 2 of 2
EPA Reg. No. 8033-125
Decision No. 543884

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Nathan Mellor by phone at 703-347-8562, or via email at mellor.nathan@epa.gov.

A handwritten signature in black ink that reads "Shaja B. Joyner". The signature is written in a cursive style with a large initial "S".

Shaja B. Joyner, Product Manager 20
Fungicide-Herbicide Branch
Registration Division 7505P

Enclosure

ACCEPTED

04/30/2020

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 8033-125

Thiophanate-methyl GROUP 1 FUNGICIDE

TOPSIN® M WSB
THIOPHANATE-METHYL FUNGICIDE
IN WATER SOLUBLE BAGS
70% Wettable Powder

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl [1,2-phenylene]-bis(iminocarbonothioyl)]bis[carbamate])*70.0%

OTHER INGREDIENTS:.....30.0%

TOTAL.....100.0%

*Also known as dimethyl 4 4'-o-phenylenebis[3-thioallophanate]

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID

If on skin or clothing:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

If in eyes:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact the Rocky Mountain Poison Control Center at 1-866-767-5089 for emergency medical treatment information.

EPA Registration No. 8033-125

EPA Establishment No.

NET WEIGHT: _____ Pounds (_____ Kgs.) Batch/Lot No. _____

Sold by:

Nippon Soda Co., Ltd.,
c/o Nisso America Inc.
379 Thornall Street, 5th Floor
Edison, NJ 08837

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: HARMFUL IF ABSORBED THROUGH SKIN OR INHALED. AVOID BREATHING DUST OR SPRAY MIST. CAUSES MODERATE EYE IRRITATION. AVOID CONTACT WITH SKIN, EYES, OR CLOTHING. WASH HANDS BEFORE EATING, DRINKING, CHEWING GUM, USING TOBACCO PRODUCTS, OR USING THE TOILET.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, applicators, and other handlers supporting dip treatment must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron.

All other mixers, loaders, applicators, and handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical resistant gloves

See engineering controls for additional requirements.

USER SAFETY REQUIREMENTS

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. **DO NOT** reuse them.

ENGINEERING CONTROLS

Water soluble packets when used correctly qualify as a closed mixing/loading system under the Worker Protection Standard for agricultural pesticides [40 CFR 170.240(d)(4)].

Mixers and loaders handling this product while it is enclosed in intact water-soluble packets may elect to wear reduced PPE of long-sleeved shirt, long pants, shoes, socks. When reduced PPE is worn because a closed system is being used, handlers must be provided all PPE specified above for "applicators and other handlers" and have such PPE immediately available for use in an emergency, for example a spill or equipment break-down."

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

DO NOT apply directly to water or areas where surface water is present or to intertidal areas below the mean high-water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. **DO NOT** contaminate water when disposing of equipment wash water or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

DO NOT apply when wind speed favors drift beyond the area intended for treatment.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI). The Restricted Entry Interval (REI) is 12 hours except as listed in the application rate tables below.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, including plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made from any waterproof material,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposures.

PRODUCT INFORMATION

Apply Topsin M WSB with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Add required amount of Topsin M WSB to partially filled tank agitated by mechanical or hydraulic means, and then add remaining required amount of water. Continuous agitation is required to keep the material in suspension.

Topsin M WSB may be tank-mixed with fungicides, insecticides and/or plant growth regulators that are approved for use on the intended crop. Tank mixes with highly alkaline pesticides, for example Bordeaux mixture or lime sulfur are not directed. No claim of compatibility with other pesticides is implied. It is directed to perform a Compatibility Jar Test to ensure tank mix product compatibility prior to use. See Compatibility Test section of this label for more information.

Begin applications as disease is first observed or expected. Tank mixing with a protectant fungicide is directed for resistance management. Use the higher rate under conditions of severe disease pressure. Also, see local State Extension Service directions for application schedules.

Aerial Applications. Use a minimum of 5 gallons of spray volume per acre for row crops, and a minimum of 10 gallons of spray volume per acre for tree crops.

Ground Applications. Use a minimum of 10 to 20 gallons of spray volume per acre for row crops.

High Volume Dilute Applications. Use the Topsin M. WSB per acre use rate for concentrate spray application for tree crops (no more than 400 gallons on apples and pears; or 300 gallons on stone fruit). When making dilute ground application, use Topsin M WSB use rate per 100 gallons. Follow all crop specific application language on this label.

Higher spray volumes will result in better coverage and better disease control. Lack of control when using below minimum spray volumes is solely at the risk of the applicator/user. This includes the use of electrostatic sprayers.

Chemigation. Please see DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS for specific information. **DO NOT** apply through any irrigation system unless these instructions are followed.

Topsin M WSB may be used for control of labeled diseases during the non-bearing years of new planting of tree fruit and tree nuts, and on nursery stock.

Plantback restrictions: **DO NOT** plant any crop not labeled for Topsin use within 30 days of last application.

Topsin M. WSB has protectant, systemic and curative actions, each specific to certain crops, fungi and climatic conditions.

RESISTANCE MANAGEMENT:

For resistance management, Topsin M WSB contains a Group 1 fungicide. Any fungal population may contain individuals naturally resistant to Topsin M WSB and other Group 1 fungicides. A gradual or total loss of pest control may occur over time if these fungicides are used repeatedly in the same fields. Appropriate resistance-management strategies should be followed.

To delay fungicide resistance, take one or more of the following steps:

- Rotate the use of Topsin M WSB Fungicide or other Group 1 fungicides within a growing season sequence with different groups that control the same pathogens.
- Use tank mixtures with fungicides from a different group that are equally effective on the target pest when such use is permitted. Use at least the minimum application rate as labeled by the manufacturer.
- Adopt an integrated disease management program for fungicide use that includes scouting, uses historical information related to pesticide use, and crop rotation, and which considers host plant resistance, impact of environmental conditions on disease development, disease thresholds, as well as cultural, biological and other chemical control practices.
- Where possible, make use of predictive disease models to effectively time fungicide applications. Note that using predictive models alone is not sufficient to manage resistance.
- Monitor treated fungal populations for resistance development.
- Contact your local extension specialist or certified crop advisor for any additional pesticide resistance-management and/or IPM directions for specific crops and pathogens.
- For further information or to report suspected resistance contact Nippon Soda Co., Ltd. at 212-490-0350. You can also contact your pesticide distributor or university extension specialist to report resistance.

MIXING INSTRUCTIONS

Topsin M WSB consists of a protective outer resealable package containing water-soluble bags. Water Soluble Bags (WSBs) are designed to dissolve in water. Agitation may be used, if necessary, to help dissolve the WSB. Failure to follow handling and mixing instructions can increase your exposure to the pesticide products in WSBs. WSBs, when used properly, qualify as a closed mixing/loading system under the Agricultural Worker Protection Standard [40 CFR 170.607(d)].

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Handling Instructions

1. Mix in spray tank only.
2. Handle WSB(s) in a manner that protects package from breakage and/or unintended release of contents. If package is broken, put on PPE required for clean-up and then continue with mixing instructions.
3. Keep the WSB(s) in outer packaging until just before use.
4. Keep the WSB dry prior to adding to the spray tank.
5. Handle with dry gloves and according to the label instructions for PPE.
6. Keep WSB intact. **DO NOT** cut or puncture WSB.
7. Reseal the WSB outer packaging to protect any unused WSB(s).

Mixing Instructions

Follow the steps below when mixing this product, including if tank mixed with other pesticide products. If being tank mixed, the mixing directions 1 through 18 below take precedence over the mixing directions of the other tank mix products. WSBs may, in some cases, be mixed with other pesticide products so long as the directions for use of all mixed products do not conflict. **DO NOT** tank mix this product with products that prohibit tank mixing or have conflicting mixing directions.

1. If a basket or strainer is present in the tank hatch, remove prior to adding the WSP to the tank.
2. Fill tank with water to approximately one-half of the desired final volume of spray.
3. Stop adding water and stop any agitation.
4. Place intact/unopened WSB(s) into the tank.
5. **DO NOT** spray water from a hose or fill pipe to break or dissolve the WSB(s).
6. Start mechanical and recirculation agitation from the bottom of tank without using any overhead recirculation, if possible. If overhead recirculation cannot be turned off, close the hatch before starting agitation.
7. Dissolving the WSB(s) may take up to 5 minutes or longer, depending on water temperature, water hardness and intensity of agitation.
8. Stop agitation before tank lid is opened.
9. Open the lid to the tank, exercising caution to avoid contact with dusts or spray mix, to verify that the WSBs have fully dissolved and the contents have been thoroughly mixed into the solution.
10. **DO NOT** add other allowed products or complete filling the tank until the bags have fully dissolved and pesticide is thoroughly mixed.
11. Add water dispersible products (including dry flowables (DF); wettable powders (WP); wettable dry granules (WDG); suspension concentrates (SC); or suspo-emulsions (SE).
12. Add water soluble products.
13. Add emulsifiable concentrates (EC).
14. Add water soluble additives (for example AMS or UAN when used).

15. Once the WSBs have fully dissolved and any other products have been added to the tank, resume filling the tank with water to the desired level, close the tank lid, and resume agitation.
16. Use the spray solution when mixing is complete.
17. Maintain agitation of the diluted pesticide mix during transport and application.
18. It is unlawful to use any registered pesticide, including WSBs, in a manner inconsistent with its label.

DO NOT mix more spray volume than will be applied that day.

| CONVERSION TABLE ACRES TREATED PER 1 LB WATER SOLUBLE BAG | |
|--|---|
| LABEL USE RATE LBS./A TOPSIN M WSB (lb a.i./A) | ACRES TREATED WITH ONE WATER SOLUBLE BAG |
| ½ LB (0.35) | 2.0 |
| 1 LB (0.7) | 1.0 |
| 2 LB (1.4) | 0.5 |

| CONVERSION TABLE ACRES TREATED PER 2.5 LB WATER SOLUBLE BAG | |
|--|---|
| LABEL USE RATE LBS./A TOPSIN M WSB (lb a.i./A) | ACRES TREATED WITH ONE WATER SOLUBLE BAG |
| ½ LB (0.35) | 5 |
| 1 LB (0.7) | 2.5 |
| 2 LB (1.4) | 1.25 |

Compatibility Test for Mix Components

It is directed a Compatibility Jar Test be conducted for uncertainty of tank mix products. For 20 gallons per acre spray volume, use 3.3 cups of water from intended source. Add components in the sequence indicated above in Mixing Instructions using 2 teaspoons for each pound or 1 teaspoon for each pint of specified label rate per acre. Tightly replace cap on the jar and invert 10 cycles between component additions.

When all tank mix products have been added to the jar and properly mixed, let sit for 15 minutes. Evaluate the solution for uniformity and stability. The mixed spray solution should not have fine particles on the bottom, nor a thick texture, nor free oil on the surface. If tank mix partners are not compatible, test with the addition of a suitable compatibility agent.

Mandatory Spray Drift Requirements

Aerial applications

- **DO NOT** release spray at a height greater than 10 ft above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is direct toward the back of the aircraft.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Ground applications

- Apply with the nozzle height recommended by the manufacturer, but not more than 3 feet above the ground or crop canopy.
- For all applications, applicators are required to use a medium or coarser spray droplet size (ASABE S572.1).
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Boom-less ground applications

- Applicators are required to use a medium or coarser spray droplet size (ASABE S572.1) for all applications.
- **DO NOT** apply when wind speeds exceed 10 miles per hour at the application site.
- **DO NOT** apply during temperature inversions.

Spray Drift Advisories

- THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT.
- BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.
- IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

Controlling Droplet Size - Ground Boom

- Volume - Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- Pressure - Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- Spray Nozzle - Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

Controlling Droplet Size - Aircraft

- Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

- BOOM HEIGHT - Ground Boom

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

- RELEASE HEIGHT - Aircraft

Higher release heights increase the potential for spray drift. When applying aurally to crops, **DO NOT** release spray at a height greater than 10 ft above the crop canopy, unless a greater application height is necessary for pilot safety.

- SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

- TEMPERATURE AND HUMIDITY

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

- TEMPERATURE INVERSIONS

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

- WIND

Drift potential generally increases with wind speed. **AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS.**

Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

- Boom-less Ground Applications:

Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

- Handheld Technology Applications:

Take precautions to minimize spray drift.

CROP SPECIFIC INFORMATION.

Follow resistance management guidelines as outlined in this label.

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|---------|--|------------------------------|------------------------------|--|
| Almonds | Brown Rot Blossom Blight (Monilinia) | 1 - 1½ lbs/A | | Apply as needed at 10 to 14-day intervals between pink bud and petal fall. Apply alone at pink bud |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--------|---|---|---------------------------------------|--|
| | Scab (Cladosporium) Jacket Rot (Monilinia, Sclerotinia, Botrytis) Leaf Blight (Seimatosporium) | (0.7 – 1.05) | | for Brown Rot control. For all other applications, apply with a contact fungicide including Ziram 76DF (EPA Reg. No. 70506-173, ziram) or Manzate Pro-Stick (EPA Reg. No. 70506-234, mancozeb) for broad-spectrum control and resistance management. Restrictions: - DO NOT apply more than 1 ½ lb/A (1.05 lb ai/A) per application. - DO NOT apply more than 3.0 lb of product (2.1 lbs a.i.)/A/year. -The minimum retreatment interval is ten (10) days. - DO NOT apply more than three (3) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days |
| Apples | Apple Scab (Venturia) Black Pox* (Helminthosporium papulosum) Flyspeck (Zygophiala) Powdery Mildew (Podosphaera) Sooty Blotch (Gloeodes) Black Rot (Botryosphaeria obtusa) Brooks Fruit Spot (Mycosphaerella) White Rot* (Botryosphaeria dothidia) | ¾ - 1 lbs/A (0.53 – 0.7) (In California: 1½ lbs/A (1.05)) | 1/5-1/4 lbs/100 gal. (0.15 – 0.18) | Apply at 5 to 10-day intervals from green tip through petal fall; continue at 7 to 14-day intervals in cover sprays. Restrictions: - DO NOT apply more than 1.0 lb/A (0.7 lb ai/A) per application. -In California, do not apply more than 1.5 lb/A (1.05 lb ai/A) per application. - DO NOT apply more than 4.0 lb of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is five (5) days. - DO NOT apply more than five (5) applications per year. - DO NOT enter or allow worker |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--|--|------------------------------|------------------------------|---|
| | * Not for use in California. | | | entry into treated areas during the restricted entry interval (REI) of 2 days -PHI: 1 day |
| Use to Control Development of Diseases on Apples Following Harvest | | | | |
| | Storage Rot Blue Mold (<i>Penicillium expansum</i>) Gray Mold (<i>Botrytis cinerea</i>) Bulls-Eye Rot (<i>Neofabraea</i> spp.) | 1 lb/A (0.7) | | <p>Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy.</p> <p>For resistance management, DO NOT use a benzimidazole fungicide post-harvest following Topsin 4.5FL pre-harvest application. Application of a non-benzimidazole post-harvest fungicide will provide additional protection from post-harvest diseases.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 1.0 lb/A (0.7 lb ai/A) per application. - DO NOT apply more than 4.0 lb of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is five (5) days. - DO NOT apply more than five (5) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days -PHI: 1 day |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|---|---|--|------------------------------|--|
| <p>Beans, dry and succulent</p> <p>Including: Lima bean Snap bean Kidney bean Mung bean Navy bean Pinto bean Wax bean Broad bean Fava bean Asparagus bean Blackeyed pea Cowpea Sweet lupine White lupine White Sweet lupine Grain lupine Chick pea Garbanzo bean</p> <p>REI: 24 hours for succulent beans; REI: 3 days for dry beans.</p> | <p>White Mold (Sclerotinia) Gray Mold (Botrytis) Anthracnose (Colletotrichum)</p> | <p>1½ - 2 lbs/A (1.05 – 1.4)</p> <p>OR</p> <p>1 – 1½ lbs/A (0.7 – 1.05)</p> | | <p><u>For one application:</u> Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.</p> <p>OR</p> <p><u>For multiple applications:</u> Make the first application when 10% to 30% of plants have at least one open bloom and follow with sequential applications on a 4- to 7-day interval. Apply prior to the development of disease for best results.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 2.0 lb/A (1.4 lb ai/A) per application. - DO NOT apply more than 4.0 lb of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is four (4) days. - DO NOT apply more than five (5) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day for succulent beans. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days for dry beans. <p>-PHI: California only, 14 days for succulent beans, 28 days for dry beans and lima beans.</p> <p>-PHI: all other States, 14 days for succulent beans and lima beans, 28 days for dry beans.</p> |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|---|---|---|------------------------------|---|
| <p>Canola, Crambe</p> <p>In North Dakota, Minnesota, and Montana (east of Interstate 15 only)</p> | <p>White Mold Sclerotinia Stem Rot (Sclerotinia sclerotiorum)</p> | <p>1-2 lbs/A (0.7 – 1.4)</p> <p>OR</p> <p>1 lb/A (0.7)</p> | | <p><u>For one application:</u> Apply at 20% to 50% flowering for single application.</p> <p>OR</p> <p><u>For multiple applications:</u> Apply with the first application at 20% to 30% flowering, and the second application at 40% to 50% flowering.</p> <p>Thorough coverage of the flowers, stems, and branches is essential for control of White Mold.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> -DO NOT apply more than 2.0 lb/A (1.4 lb ai/A) per application. -DO NOT apply more than 2 lbs of product (1.4 lbs a.i.)/A/year. -DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. -PHI: 40 days |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--|--|------------------------------|------------------------------|--|
| Cucurbits: Cantaloupe, Casaba, Cucumbers, Melons, Pumpkins, Summer and Winter Squash, and Watermelon | | | | <p>Topsin M WSB can be used in a tank mix with a protectant fungicide including Manzate Pro-Stick (EPA Reg. No. 70506-234, mancozeb), Penncozeb (EPA Reg. No. 70506-185, mancozeb), or Oranil 6L (EPA Reg. No. 70506-262, chlorothalonil) for additional disease control and resistance management.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 0.5 lb of product (0.35 lb a.i./A) per application. - DO NOT apply more than 3.0 lbs of product (2.1 lbs a.i.)/A/year from any combination of application timings. -The minimum retreatment interval is 4 days. - DO NOT make more than 5 applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. - PHI: 1 day |
| | Acremonium/ Cephalosporium Hypocotyl Rot | ½ lb/A (0.5 lb) | | <p>Apply in-furrow, on top of the seeds at planting.</p> <p>Restriction: DO NOT use less than 10 gallons of water per acre.</p> |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-----------------------------|---|------------------------------|------------------------------|--|
| | Anthracnose* (Colletotrichum) Gummy Stem Blight* (Didymella) Powdery Mildew (Erysiphe, Sphaerotheca, Podosphaera) Target Spot* (Corynespora) * Not for use in California. | | | Begin applications when plants begin to run or when disease first appears and repeat at 7-14 day intervals or as needed. For Target Spot, use at 7-day intervals as needed. |
| | Belly Rots* (Rhizoctonia, Fusarium) * Not for use in California. | | | Apply in sufficient volume to allow runoff to the soil. Will not control Pythium or Phytophthora. |
| | Suppression of Vine Decline (Monosporascus) Charcoal Rot (Macrophomina) | | | Apply through buried drip irrigation (chemigation) to the root zone. Apply at 14-day intervals, beginning at emergence and continuing to harvest. Applications weekly or biweekly, beginning 4-6 weeks prior to harvest will also offer suppression, but may not be as effective as a season-long program. |
| Garlic (clove treatment) | Penicillium Clove Rot | | 1 lb/100 gal. (0.7) | Completely immerse garlic cloves in suspension for at least 5 minutes. Continuously agitate the solution tank by hydraulic or mechanical means. After treatment, remove cloves from solution and drain. Dry cloves after treatment and prior to planting. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--------|---|---|------------------------------|--|
| Grapes | | | | <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 1.5 lbs of product/A per application -DO NOT apply more than 6 lbs of product (4.2 lbs a.i.)/A/year. -The minimum retreatment interval is fourteen (14) days. - DO NOT make more than four applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. -PHI: 7 days |
| | <p>WEST OF THE ROCKY MOUNTAINS: Bunch Rot (Botrytis) Powdery Mildew (Uncinula)</p> | <p>1 - 1½ lbs/A (0.7 – 1.05)</p> | | <p>Apply at first bloom and repeat 14 days later or as needed if severe disease conditions exist. Make an additional application 3 to 4 weeks before harvest or when sugar begins to build; repeat 14 days later if conditions favorable for disease persist. For Powdery Mildew continue applications through the season. Use in combination or rotation with a sulfur product including Microthiol® Disperss® (EPA Reg. No. 70506-187, sulfur) and/or other systemic fungicides.</p> |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------|----------------------------------|--|------------------------------|---|
| | Eutypa Dieback Botryosphaeria | Paint-On 1 lb Topsin M WSB (0.7 lb a.i.) per 5 gallons of water; or 3.2 oz (2.24 oz a.i.) per 1 gallon of water | | Paint-On Application: Apply as a paint to cut or pruned surfaces immediately after cutting and before rain, dew, fog, and fungal spores come into contact with fresh wood. Results are improved by thorough coverage of the pruning wounds and by pruning at a time when little or no rain is expected soon after treatment. A second application may be necessary within 2 weeks if rainfall, fog, or high humidity persist which slows pruning wound healing. |
| | | Spray 1.5 lbs/A (1.05 lb a.i.) in a minimum of 50 gallons of water | | Spray-On Application: Apply as a directed spray with power operated ground application equipment to thoroughly wet cordons, spurs, and all cut wood surfaces within 24 hours of pruning. Topsin M WSB may be tank-mixed with other fungicides registered for protection against this and similar grape canker pathogens. The addition of a labeled rate of an organosilicone, crop oil, or other adjuvants which enhance spreading and absorption may increase penetration of cut wood surfaces. The addition of a registered dye to provide visual confirmation of thorough coverage of pruning wounds can be useful. A second application may be necessary within 2 weeks if rainfall, fog, or high humidity persist which slows pruning wound healing. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------|--|---|------------------------------|---|
| | EAST OF THE ROCKY MOUNTAINS: Bitter Rot (Melanconium) Black Rot (Guignardia) Powdery Mildew (Uncinula) Phomopsis Cane and Leaf Spot (Phomopsis) | $\frac{3}{4}$ - 1½ lbs/A (0.53 – 1.05) | | Apply when foliage first develops and repeat at 14 to 21-day intervals or as needed. |
| | Bunch Rot (Botrytis) | 1 - 1½ lbs/A (0.7 – 1.05) | | Apply at first bloom and repeat 14 days later or as needed if severe disease conditions exist. Make an additional application 3 to 4 weeks before harvest or when sugar begins to build; repeat 14 days later if conditions favorable for disease persist. DO NOT use where resistant strains of Botrytis are present. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-------------------|----------------------------------|---|------------------------------|--|
| | Eutypa Dieback Botryosphaeria | Paint-On 1lb Topsin M WSB (0.7 lb a.i.) per 5 gallons of water; or 3.2 oz (2.24 oz a.i.) per 1 gallon of water | | Paint-On Application: Apply as a paint to cut or pruned surfaces immediately after cutting and before rain, dew, fog, and fungal spores come into contact with fresh wood. Results are improved by thorough coverage of the pruning wounds and by pruning at a time when little or no rain is expected soon after treatment. A second application may be necessary within 2 weeks if rainfall, fog, or high humidity persist which slows pruning wound healing. |
| | | Spray 1.5 lbs/A (1.05 lb a.i.) in a minimum of 30 gallons of water | | Spray-On Application: Apply as a directed spray with power operated ground application equipment to thoroughly wet cordons, spurs, and all cut wood surfaces within 24 hours of pruning. Topsin M. WSB may be tank-mixed with other fungicides registered for protection against this and similar grape canker pathogens. The addition of a labeled rate of an organosilicone, crop oil, or other adjuvants which enhance spreading and absorption may increase penetration of cut wood surfaces. The addition of a registered dye to provide visual confirmation of thorough coverage of pruning wounds can be useful. A second application may be necessary within 2 weeks if rainfall, fog, or high humidity persist which slows pruning wound healing. |
| Onions* Garlic | White Rot (Sclerotium | 2 lbs/A (1.4 lb | | Spray directly into the open furrow at the time of planting |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|---|--|-------------------------------|------------------------------|--|
| (In furrow) * Not for use in California. | cepivorum) | a.i.) Broadcast equivalent | | seed, sets or bulbs. Restrictions: -Not for this use through any type of irrigation system. - DO NOT apply more than 2.0 lbs of product (1.4 lbs a.i.)per application. - DO NOT make for than one application per year. - DO NOT apply more than 2.0 lbs of product (1.4 lbs a.i.)/A/year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. |
| Peanuts | Early Leaf Spot (Cercospora) Late Leaf Spot (Cercosporidium) Rust (Puccinia) Limb Rot (Rhizoctonia) Web Blotch (Ascochyta) | ½ lb/A (0.35) | | Begin applications when disease first appears and repeat at 14-day intervals as needed. Restrictions: - DO NOT apply more than 0.5 lb of product (0.35 lbs a.i.) per application. - DO NOT apply more than 2.0 lbs of product (1.4 lbs a.i.)/A/year. -The minimum retreatment interval is 14 days. - DO NOT apply more than 4 applications per year. -Topsin M WSB should not be used alone. Use only in combination with a non-benzimidazole fungicide including Manzate Pro-Stick (EPA Reg. No. 70506-234, mancozeb), Penncozeb (EPA Reg. No. 70506-185, mancozeb), or Oranil 6L |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-------|---|------------------------------|------------------------------|---|
| | | | | (EPA Reg. No. 70506-262, chlorothalonil) - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. -PHI: 14 days |
| Pears | Pear Scab (Venturia) Sooty Blotch (Gloeodes) Flyspeck (Zygophiala) Powdery Mildew (Podosphaera) Leaf Spot (Fabraea) | 1 lb/A (0.7) | ¼ lb/100 gal. (0.18) | Apply at 5 to 10-day intervals from green tip through petal fall; continue at 7 to 14-day intervals in the cover sprays. Restrictions: - DO NOT apply more than 1.0 lb/A (0.7 lb ai/A) per application. - DO NOT apply more than 4.0 lb of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is five (5) days. - DO NOT apply more than four (4) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days -PHI: 1 day |
| | Use to control Development of Diseases on Pears Following Harvest | | | |
| | Storage Rot Blue Mold (<i>Penicillium expansum</i>) Gray Mold (<i>Botrytis</i>) | 1 lb/A (0.7) | | Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--------|--|------------------------------|------------------------------|---|
| | <i>cinerea</i> Bulls-Eye Rot (<i>Neofabraea</i> spp.) | | | <p>required. Application closer to harvest may provide better efficacy.</p> <p>For resistance management, DO NOT use a benzimidazole fungicide post-harvest following Topsin M WSB pre-harvest application. Application of a non-benzimidazole post-harvest fungicide will provide additional protection from post-harvest diseases.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> -DO NOT apply more than 4 lbs of product (2.8 lbs a.i.)/A/year. -DO NOT apply more than 1.0 lb/A (0.7 lb ai/A) per application. -DO NOT apply more than four (4) applications per year. -The minimum retreatment interval is 7 days. -DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days -PHI: 1 day |
| Pecans | Brown Spot (Cercospora) Downy Spot (Mycosphaerella) Liver Spot (Gnomonia) Powdery Mildew (Microsphaera) Scab (Fusicladium) Stem End Blight | 1 lb/A (0.7) | | <p>Begin applications when first leaves are showing and repeat at 3- to 4-week intervals until shuck split.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> -DO NOT apply after shuck split. -DO NOT apply more than 1.0 lb/A (0.7 lb ai/A) per application. -DO NOT apply more than 3 lbs of product (2.1 lbs a.i.)/A/year. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------------|--|------------------------------------|------------------------------|---|
| | (Botryosphaeria) Zonate Leaf Spot (Cristulariella) | | | <p>-The minimum retreatment interval is 21 days.</p> <p>-DO NOT make more than three applications per year.</p> <p>-DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p> |
| Pistachios | Shoot Blight (Botrytis, Botryosphaeria) | 1½ - 2 lbs/A (1.05 – 1.4) | | <p>Apply at bloom. Apply in a minimum of 100 gallons per acre by ground or 20 gallons per acre by air. For aerial application, fly over every row or center</p> <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 2.0 lbs/A (1.4 lb. a.i./A) per application. - DO NOT apply more than 2.0 lbs of product (1.4 lbs a.i.)/A/year. - DO NOT apply more than one (1) application per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days. |
| Potatoes | White Mold (Sclerotinia sclerotiorum) | 1 - 1½ lb/A (0.7 – 1.05) | | <p>Make first application just prior to row closure. Repeat the application within 7-14 days and at 7-14 day intervals if conditions for disease development are favorable. Thorough coverage of the</p> |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------|----------|------------------------------|------------------------------|---|
| | | | | <p>flowers, stems, and branches is essential for disease control. Use a minimum of 6 gallons/A of water for aerial application. Apply prior to the development of disease for optimal results. May be tank mixed with Manzate Pro-Stick (EPA Reg. No. 70506-234, mancozeb) or Penncozeb (EPA Reg. No. 70506-185, mancozeb)for early and late blight control.</p> <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 1.5 lbs/A (1.05 lb. a.i./A) per application. - DO NOT apply more than 4.0 lbs of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is seven (7) days. - DO NOT apply more than four (4) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. -Pre-harvest interval: 21 days |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|---|----------|---|------------------------------|---|
| Soybeans | | | | <p>Restrictions:</p> <ul style="list-style-type: none"> -DO NOT apply more than 2.0 lbs of product/A (1.4 lb. a.i./A) per for a single application for white mold control otherwise do not apply more than 1.0 lb of product/A (0.7 lb. a.i./A) per for a single application. -DO NOT apply more than 2.0 lbs. of product (1.4 lbs a.i.)/A/year. -The minimum retreatment interval is seven (7) days. -DO NOT apply more than two (2) applications per year. -DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. -Pre-harvest interval: 21 days -DO NOT graze or feed treated vines or hay to livestock. |
| Anthracnose (Colletotrichum) Brown Spot (Septoria) Frogeye Leaf Spot (Cercospora) Pod and Stem Blight (Diaporthe, Phomopsis) Purple Seed Stain (Cercospora) | | $\frac{1}{2}$ - 1 lbs/A (0.35 – 0.7) | | Apply from full bloom to when pods are $\frac{1}{8}$ " to $\frac{1}{4}$ " in length. Make a second application 14 to 21 days later. DO NOT make the second application later than 14 days after pods average $\frac{1}{4}$ " in length or when beans form in the pod. Use the high rate under severe disease pressure. |
| | | 1 lb/A (0.7) | | FOR SEED BEANS ONLY--- For seed quality, make a single application when beans form in the pod. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-------------|---|---|------------------------------|---|
| | White Mold (Sclerotinia) | 1 lb/A (0.7) OR 2 lbs/A (1.4) | | For split applications, apply initial application of 1 lb/A at early bloom (R-1 stage). Follow with a second application 7-14 days later. OR For single application, apply 2 lbs/A at early bloom (R-1 stage). Thorough coverage of the flowers, stems, and branches is essential for disease control. Use a minimum of 5 gallons water/A by air. |
| | Aerial Blight (suppression) | 1 lb/A (0.7) | | Make initial application when disease threatens and repeat 14-21 days later if needed. |
| Stone Fruit | | | | Restrictions: - DO NOT apply more than 1.5 lbs of product/A (1.05 lb. a.i./A) per application. - DO NOT apply more than 4.0 lbs of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is ten (10) days. - DO NOT make more than four (4) applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days. -Pre-harvest interval: 1 day |
| - Apricots | Brown Rot Blossom Blight Fruit Brown Rot (Monilinia) | 1 - 1½ lbs/A (0.7 – 1.05) | ⅓ - ½ lbs/100 gal. (0.23 – | Apply at early bloom (red bud). Make a second application at full bloom. If needed, under severe disease |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------------------------------|---|--|---|---|
| | | (In California 1 ½ lbs/A (1.05)) | 0.35) | pressure, apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. |
| - Cherries Sweet and Sour | Brown Rot Blossom Blight European Brown Rot Fruit Brown Rot (Monilinia) | 1 - 1½ (0.7 – 1.05) (in CA use 1½ (1.05)) | ⅓ - ½ lbs/100 gal. (0.23 – 0.35) | Apply at early bloom (early popcorn). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. |
| | Cherry Leaf Spot (Coccomyces) | 1⅛ - 1½ (0.8 – 1.05) | ⅜ - ½ lbs/100 gal. (0.26 – 0.35) | Applications may be made at petal fall or before (when leaves first unfold) and at first, second, and third cover at 10 to 14-day intervals and one spray 14 to 21 days after harvest. |
| | Powdery Mildew (Podosphaera, Sphaerotheca) | 1 - 1½ lbs/A (0.7 – 1.05) (In California use 1 ½ lbs/A (1.05)) PLUS 1⅛ - 1½ lbs/A (0.8 – 1.05) | ⅓ - ½ lbs/100 gal. (0.23 – 0.35) PLUS ⅜ - ½ lbs/100 gal. (0.26 – 0.35) | Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover. |
| - Nectarines | Brown Rot Blossom Blight | 1 - 1½ lbs/A | ⅓ - ½ lbs/100 | Apply at early bloom (pink bud). Make a second application at full |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-----------|---|--|--|---|
| | Fruit Brown Rot (Monilinia) | (0.7 – 1.05) (In California use 1 ½ lbs/A (1.05)) | gal. (0.23 – 0.35) | bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. |
| - Peaches | Brown Rot Blossom Blight Fruit Brown Rot (Monilinia) | 1 - 1½ lbs/A (0.7 – 1.05) (In California use 1 ½ lbs/A (1.05)) | ⅓ - ½ lbs/100 gal. 0.23 – 0.35) | Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. |
| | Peach Scab (Cladosporium) | 1 - 1½ lbs/A (0.7 – 1.05) (In California use 1 ½ lbs/A (1.05)) PLUS 1⅛ - 1½ lbs/A (0.8 – 1.05) | ⅓ - ½ lbs/100 gal. (0.23 – 0.35) PLUS ⅜ - ½ lbs/100 gal (0.26 – 0.35) | Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at shuck split and at first cover sprays. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--------------------|---|---|----------------------------------|---|
| - Plums and Prunes | Brown Rot Blossom Blight Fruit Brown Rot (Monilinia) | 1 - 1½ lbs/A (0.7 – 1.05) (In California use 1 ½ lbs/A (1.05)) | ⅓ - ½ lbs/100 gal. (0.23 – 0.35) | Apply at early bloom (green tip). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10 to 14-day intervals between full bloom and final pre-harvest sprays. |
| | Black Knot (Dibotryon) | | | Apply at pre-bloom, petal fall, and at first, second, or third cover sprays at 10 to 14-day intervals. |
| | Leaf Spot (Coccomyces) | | | Applications may be made at petal fall, shuck split, and at first, second, and third cover sprays at 10 to 14-day intervals and 1 spray 14 to 21 days after harvest. |
| Strawberries | | | | <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 1.0 lb of product/A (0.7 lb. a.i./A) per application. - DO NOT apply more than 4.0 lbs of product (2.8 lbs a.i.)/A/year. -The minimum retreatment interval is seven (7) days. - a DO NOT apply more than 4 applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. -Pre-harvest interval: 1 day |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|------|---|---|------------------------------|---|
| | Crown Rot* (Colletotrichum spp.) Suppression only * Not for use in California. | $\frac{3}{4}$ - 1 lbs/A (0.53 – 0.7) | | Begin applications after establishment of the transplants and continue through first bloom at 10 to 14-day intervals. Use the high rate if the fields have a history of Colletotrichum crown rot and/or conditions are favorable for development of the disease. Will not control Phytophthora species. |
| | Fruit Rot (Botrytis) Leaf Blight (Dendrophoma) Leaf Scorch (Diplocarpon) Powdery Mildew (Sphaerotheca) | | | Begin applications at early bloom and continue at 7 to 10-day intervals. Use the higher rate under conditions of severe disease pressure. |
| | Charcoal Rot (Macrophomina) | 1 lb/A (0.7) | | Apply through buried drip irrigation (chemigation) to the root zone. Apply at 14-day intervals beginning at transplant. |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|-------------|-----------------------------------|------------------------------|------------------------------|--|
| Sugar Beets | | | | <p>Restrictions:</p> <ul style="list-style-type: none"> - DO NOT apply more than 1.0 lb of product/A (0.7 lb. a.i./A) per application. - DO NOT apply more than 3.0 lbs of product (2.1 lbs a.i.)/A/year. -The minimum retreatment interval is fourteen (14) days. - DO NOT apply more than 3 applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day. -Pre-harvest interval: 21 days |
| | Cercospora Leaf Spot (Cercospora) | ½ - 1 lb/A | | <p>Apply when conditions become favorable for disease development before the disease appears and follow with a non-benzimidazole fungicide within 14 days of application or as needed. Topsin M WSB should be tank mixed with a protectant fungicide including Manzate Pro-Stick (EPA Reg. No. 70506-234, mancozeb), Penncozeb (EPA Reg. No. 70506-185, mancozeb) or Super Tin 4L (EPA Reg. No. 70506-212, triphenyltin hydroxide) when resistant strains of Cercospora are present in the field.</p> <p>For areas east of the Rocky Mountans: DO NOT make more than one application of Topsin M WSB per season for Cercospora Leaf Spot.</p> |

| Crop | Diseases | Lbs product/Acre (lb a.i./A) | Lb/100 Gal (lb a.i./100 gal) | Application Instructions |
|--|---|------------------------------|------------------------------|---|
| | Powdery Mildew (Erysiphe) | | | Apply as soon as disease symptoms appear and follow with a non-benzimidazole fungicide at a 14-day interval or as needed. Topsin M WSB can be tank mixed with sulfur products including Microthiol Disperss (EPA Reg. No. 70506-187, sulfur) at 5 to 10 lbs/A for additional disease control and resistance management. |
| Triticale and Fall-seeded Wheat For this use in Idaho, Oregon, and Washington ONLY | Foot Rot, Strawbreaker, Eye Spot (Pseudocercospora) | 1 lb/A (0.7) | | Apply in a single application by air or ground after tillering but before stem elongation has begun. Use sufficient water to obtain thorough coverage. Restrictions: <ul style="list-style-type: none"> - DO NOT apply more than 1.0 lb of product (0.7 lb a.i./A) per application. - DO NOT apply more than 1.0 lb of product (0.7 lb a.i.)/A/year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours. - DO NOT cut for hay within 90 days of application. - DO NOT allow livestock to graze in treated areas before harvest. |

NOTE: Dilute sprays are not to exceed maximum rate per acre.

DIRECTIONS FOR USE

In the Aid in Control of Certain Canker Diseases Following Pruning of Almonds, Apricots, Cherries, Grapes, Nectarines, Peaches, Plums and Prunes.

To protect pruning cuts from canker diseases caused by fungal pathogens including Botryosphaeria spp. *Eutypa lata*, *Leucostoma personii* (Cytospora), *Calosphaeria pulchella*, *Lasiodiplodia theobromae*, and *Diaporthe neotheicola* (Phomopsis) apply Topsin M WSB

fungicide in spray or paint-on to pruning wounds.

Spray: Apply Topsin M WSB at 1.5 lbs per acre (1.05 lb a.i.) in a minimum of 30 gallons alone, or a minimum of 50 gallons when tank mixed per acre, using power operated ground application equipment or a backpack sprayer. If backpack sprayer is used, chemical-resistant coveralls or a chemical-resistant coat must be worn.

Paint-on: Apply Topsin M WSB at 3.2 oz (2.24 oz a.i.) per 1 gallon water (1lb (0.7 lb a.i.) per 5 gallons of water) as a paint to cut or pruned surfaces immediately after cutting and before rain, dew, fog and fungal spores come into contact with fresh wood.

Results are improved by thorough coverage of pruning wounds and by pruning at a time when little or no rain is expected soon after treatment.

For improved management of canker diseases by fungal pathogens and for fungicide resistance management, it is directed to apply Topsin M WSB in a tank-mix with Rally® 40WSP (EPA Reg. No. 62719-410, myclobutanil) at 5 oz per acre for grapes and at 6 oz/acre for almonds, apricots, cherries, nectarines, peaches, plums and prunes and/or in the tank mix with other fungicides registered for canker disease management. Refer to the Rally 40 WSP (EPA Reg. No. 62719-410, myclobutanil) Special 2(ee) Recommendation for further information on this use.

Protect pruning cuts as soon as possible especially if irrigation, rainfall or fog is expected. Application within 24 hours is highly advised. Applications after 24 hours are permitted, but disease control may be reduced. Assure thorough coverage of all cut wood surfaces. For these pathogens, multiple applications may be needed. Make additional applications at approximately two-week intervals, especially if irrigation, rainfall or high humidity conditions exist.

The addition of a labeled rate of a registered organo-silicone spray adjuvant may increase penetration of cut wood surfaces. It is the responsibility of the user to assure that the organo-silicone spray adjuvant is safe to the crop under the existing conditions of use and label on the adjuvant container. Addition of a registered spray dye to the tank mix, and visual inspection of the pruning cuts after application, will help assure thorough coverage of susceptible tissue.

Specific Use Restrictions:

| Crop | Maximum Use Rate Per Acre Per Year | REI |
|---|------------------------------------|--------|
| Almonds | 3 lbs (2.1 lbs ai)/A/Year | 3 days |
| Grapes | 6 lbs (4.2 lbs ai)/A/Year | 2 days |
| Apricots, Cherries, Nectarines, Peaches, Plums and Prunes | 4 lbs (2.8 lbs ai)/A/Year | 2 days |

DIRECTIONS FOR USE ON CONIFERS
(Not for this use in California)

Conifers foliar treatment

| CROP | DISEASE | RATE (Lb/A), Minimum Gallonge | APPLICATION INSTRUCTIONS |
|--|---|---|--|
| Conifers (Pine) Austrian Red Scots Christmas Trees | Tip Blight (Diplodia) | 1 lb./A (0.7 lb a.i.) per 100 gal/A | Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence. Restrictions: - DO NOT apply more than 60 fl. oz. of product (2.1 lbs. a.i.)/A/year. -The minimum retreatment interval is ten (10) days. - DO NOT apply more than 3 applications per year. - DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. - DO NOT graze livestock in treated areas. |
| (Fir) Douglas | Swiss Needle Cast (Phaenocarpa) Rhabdocline Needle Cast | 1 lb./A (0.7 lb a.i.) per 50 gal/A | Apply initially in early May. Repeat at 4-week intervals. Add a spreader/sticker to improve coverage. Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers. DO NOT apply more than 5 lbs. of product (3.5 lbs. a.i.)/A/year. |

| Conifers Seedling Treatment | | | |
|---|--------------------------------------|--|--|
| Conifers Longleaf | Brown Needle Blight (Scirrhia) | 1 oz. product (0.7 oz a.i.) per 9.5 oz. dry Kaolinite clay for seedling roots | Wet seedling roots in clean water, then dip roots into Topsin M WSB /Kaolinite mixture. |
| Loblolly Longleaf Slash | Fusarium and Rhizoctonia Root Rot | 2 oz. product (1.4 oz a.i.) per 50 oz. Kaolinite clay, plus enough water to make a slurry | Dip seedling roots into Topsin M WSB /Kaolinite slurry. |
| Restrictions for Seedling Treatment: - DO NOT apply mixture to seedling foliage - During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90°F or less than 32°F. - DO NOT enter or allow workers to enter into treated areas during the restricted entry interval (REI) of 12 hours. - Note: Topsin M WSB does not control Pythium or Phytophthora. | | | |

DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS

USE IN CALIFORNIA BY CHEMIGATION ONLY FOR BEANS, CUCURBITS (CANTALOUPE, CASABA, CUCUMBERS, MELONS, PUMPKINS, SQUASH, WATERMELONS), PEANUTS, POTATOES, SOYBEANS, STRAWBERRIES, AND SUGAR BEETS.

PRODUCT INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move; or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. **DO NOT** apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

DO NOT connect chemigation system to any public water system. Public water system means a system for the provision of piped water for human consumption if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

SYSTEM REQUIREMENTS

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch that will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, for example a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

APPLICATION INSTRUCTIONS FOR CHEMIGATION SYSTEMS

Observe the requirements in the System Requirements section above.

Apply Topsin M WSB only through systems containing anti-syphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off. Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than specified quantities of irrigation water per acre may result in decreased product performance.

DO NOT apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area. Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Topsin M WSB may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, for example aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water.

Prepare a suspension of Topsin M WSB in a mix tank. Fill the tank with $\frac{1}{2}$ or $\frac{3}{4}$ of the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of Topsin M WSB and then the remaining volume of water.

Sprinkler Irrigation

Observe all System Requirements and Application Instructions above.

Set sprinkler system to deliver a maximum of 0.4 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of Topsin M WSB into the irrigation water line so as to deliver the desired rate per acre. The suspension of Topsin M WSB should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. When treatment with Topsin M WSB has been completed, **DO NOT** irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

DO NOT apply when wind speed favors drift beyond the area intended for treatment. Where sprinkler distributed patterns do not overlap sufficiently, unacceptable disease control may result.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation

Observe all System Requirements and Application Instructions above.

A pesticide supply tank is advised.

EMERGENCY TELEPHONE NUMBERS:
CHEMTREC: (800) 424-9300
MEDICAL: (866) 767-5089 Rocky Mountain Poison Control Center

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Nippon Soda Co., Ltd. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of Nippon Soda Co., Ltd. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Nippon Soda Co., Ltd. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NIPPON SODA CO., LTD. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, Nippon Soda Co., Ltd. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF NIPPON SODA CO., LTD. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF NIPPON SODA CO., LTD. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Nippon Soda Co., Ltd. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Nippon Soda Co., Ltd.

Topsin is a registered trademark of Nippon Soda Company, Ltd.
Penncozeb, Microthiol, and Disperss are registered trademarks of United Phosphorus, Inc.



NIPPON SODA CO.,LTD.

SHIN-OHTEMACHI BLDG., 2-1, 2-CHOME OHTEMACHI
CHIYODA-KU, TOKYO 100-8165, JAPAN

Supplemental Label

TOPSIN[®] M WSB Fungicide For Use on Soybeans to Control White Mold

EPA Reg. No. 8033-125

This supplemental label expires on April 30, 2023
and must not be used or distributed after this date

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
Follow all applicable directions, restrictions and precautions on the federally-registered label.

This label must be in the possession of the user at the time of pesticide application. Read the label affixed to the container for TOPSIN M WSB Fungicide before applying. Use of TOPSIN M WSB Fungicide according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container of TOPSIN M WSB Fungicide.

| Crop | Disease | Lbs of product/A (lb a.i./A) | Application Instructions |
|----------|-----------------------------|---|--|
| Soybeans | White mold (Sclerotinia) | 1.0 (0.7) for split application OR 2.0 (1.4) for single application | For split applications, apply initial application of 1.0 lb of product (0.7 lb a.i.)/A at early bloom (R-1 stage). Follow with a second application 7 to 14 days later. OR For a single application, apply 2.0 lbs of product (1.4 lb a.i.)/A at early bloom (R-1 stage). Thorough coverage of the flowers, stems, and branches is essential for disease control. Use a minimum of 5 gallons water/A by air. |

Restrictions:

- DO NOT apply more than 2.0 lbs of product/A (1.4 lb. a.i./A) per for a single application for white mold control otherwise DO NOT apply more than 1.0 lb of product/A (0.7 lb. a.i./A) per for a single application.
- DO NOT apply more than 2.0 lbs of product (1.4 lbs a.i.)/A/year.
- The minimum retreatment interval is seven (7) days.
- DO NOT apply more than two (2) applications per year.
- DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 1 day.
- Pre-harvest interval: 21 days
- DO NOT graze or feed treated vines or hay to livestock

